

Notice of Allowability

Application No.

09/814,415

Examiner

Yemane M. Gerezgiher

Applicant(s)

GILDE ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/17/2007.
2. ☒ The allowed claim(s) is/are 33-43, 45-49, 51-54, 56-59, 61, 63 and 64 (renumbered 1-27).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 5/4/10
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

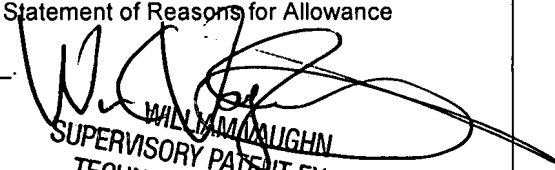
5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____

7. ☒ Examiner's Amendment/Comment

8. ☐ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____


WILLIAM M. MOUGHN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Frank J. Bozzo (Reg. No.: 36,756) on September 10, 2007.

The application has been amended as follows:

In the claims:

- Please cancel claims 44, 50, 55, 60 and 62 and replace claims 33, 53, 61 and 64 as follows:

33. An apparatus for directing communications among a plurality of resources, comprising:

one or more switch components configured to:

analyze each of a plurality of data flows; and

determine if each of the data flows is associated with a requested resource and:

when the data flow is associated with the requested resource, direct the data flow to the requested resource; and

when the data flow is not associated with a requested resource, request instructions from a control component;

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one or more control components each configured to:

receive instruction requests from a request from at least one the one or more switch components component for instructions on handling the data flow when the data flow is not associated with a requested resource, wherein if a failed control component is unable to process instruction requests, one or more other control components process the instruction requests to provide fault tolerance for the failed control component; and

provide instructions to the switch component for handling the unassociated data flow for one of:

handling of subsequent data flows not associated with a requested resource to achieve load balancing between the one or more resources; and

delete a data flow that has timed out,

wherein a capacity of each of the one or more switch components and a capacity of the one or more of control components is independently scalable by one or more of:

changing the capacity of one or more of the switch components and one or more of the control components; and

changing one or more of a number of the switch components and control components.

53. A method for directing communications among a plurality of resources, comprising:

employing one or more switch components to:

analyze each of a plurality of data flows; and

determine if the data flow is associated with a requested resource

and:

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when the data flow is associated with the requested resource, direct the data flow to the requested resource; and

when the data flow is unassociated with a requested resource, request instructions from a control component;

employing a plurality of control components configured to:

receive requests ~~a request~~ from the one or more ~~at least one~~ switch components ~~component~~ for instructions on handling the unassociated data flow, wherein if a failed control component is unable to process instruction requests, one or more other control components process the instruction requests to provide fault tolerance for the failed control component; and

provide instructions to the one or more switch components ~~component~~ for handling the unassociated data flow for one of:

handling of subsequent data flows not associated with a requested resource to achieve load balancing between the one or more resources; and

delete a data flow that has timed out; and

~~process requests from the one or more switch components directed to an other control component when the other control component fails to operate;~~

scaling a capacity of the one or more switch components by one of changing a capacity of the one or more switch components and a number of the switch components used; and

scaling a capacity of the plurality of control components by one of changing a capacity of the plurality of control components and a number of the control components used.

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61. A method for directing a plurality of data among a plurality of resources, comprising:

monitoring which of the plurality of resources is to receive an existing data flow;

providing one or more switch components configured to:

when the data flow is associated with a specified resource, direct the existing data flow to the requested resource; and

when the data flow is not associated with a specified resource, request instructions from a control component;

providing a plurality of control components configured to:

receive requests from the one or more ~~a request from at least one~~ switch components ~~component~~ for instructions on handling the unassociated data flow;

provide instructions to the switch component for handling the unassociated data flow, including one of:

handling of subsequent data flows not associated with a requested resource to achieve load balancing between the one or more resources; and

delete a data flow that has timed out; and

replace a ~~another~~ failing control component in processing instruction requests from the one or more switch components when the failing control component fails to operate to provide fault tolerance for the failing control component;

scaling a capacity of the one or more switch components by one of changing a capacity of the one or more switch components and a number of the switch components used; and

scaling a capacity of the plurality of control components by one of changing a capacity of the plurality of control components and a number of the control components used.

64. An apparatus for directing communications among a plurality of resources, comprising:

a controller;

one or more switch components operably coupled with the controller and configured to:

monitor a plurality of data flows,

identify a first group of data flows associated with one or more resources and a second group of data flows unassociated with the one or more requested resources, and one of:

direct the first group of data flows to the requested resources; and, ~~or~~

request data flow direction instructions from one or more control components, which when executed by the one or more switch components, enable the switch components to direct the second group of data flows to a resource specified by the one or more control components; and

the one or more control components, operably coupled with the controller, being configured to:

receive the requests for the data flow direction instructions for the one or more switch components, wherein when a failing control component is unable to process from the one or more switch components, an other of the control components provides fault tolerance for the failing control component;

provide the one or more switch components with the data flow direction instructions for directing the second group of data flows to the particular location, including one of:

handling of subsequent data flows not associated with
a requested resource to achieve load balancing between the
one or more resources; and
delete a data flow that has timed out; and

wherein the controller is configured to independently scale a capacity of the one or more switch components and a capacity of the one or more control components by at least one of:

adjusting the capacity of the one or more switch components and the capacity of the one or more control components to direct at least one of the first and second groups of data flows; and

utilizing a fewer or greater number of the one or more switch components or the one or more control components to direct at least one of the first and second groups of data flows.

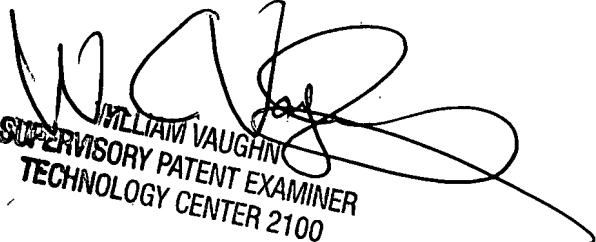
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yemane M. Gerezgiher whose telephone number is (571) 272-3927. The examiner can normally be reached on 9:00 AM - 6:00 PM Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached at (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Patent Examiner, AU: 2144


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